



U.S. Army Criminal Investigation Laboratory

Army Transforming America

Crime Scene Investigations

WHEN people enter military service, they give up one important element of their individuality — their fingerprints. These prints, which can be used to identify a soldier's remains, are collated and stored in the world's largest fingerprint repository at the FBI center in Clarksburg, W.Va. Few people realize, however, that the history of FBI forensics research begins with a former Army doctor.

Calvin H. Goddard inaugurated the science of firearm identification and cofounded the Bureau of Forensic Ballistics, in New York City, in 1925. Goddard's assistant, Philip O. Gravelle, adapted a comparison microscope to help match fired bullets with their cartridge casings. In 1929 Goddard used these advances to link weapons with bullets used in Chicago's "St. Valentine's Day Massacre" gangland killing. Goddard went on to train many of the first forensic scientists, including the first person to staff the FBI laboratory, and he set up several other forensics laboratories around the nation. These included the U.S. Army Criminal Investigation Laboratory-Pacific, which he established in 1948 after returning to the Army.

Goddard's fundamental concepts of using science to serve justice continue today at the Army Criminal Investigation Laboratory, now located at Fort Gillem, Ga. The CID lab itself has further developed the tools first used in forensic science some three-quarters of a century ago. CID researchers refined the process of "superglue fuming," which the Army adopted from Japanese researchers in the 1970s. Police worldwide now use the technique to uncover fingerprints on such nonporous items as knives, guns, plastic bags and bottles. The Army Crime Lab has also advanced a laser technique to enhance fingerprints on paper and cardboard items, and introduced the first laser-developed fingerprints to be used as evidence in an American court.

In the thousands of criminal cases that go to trial each year, fingerprints and firearm ballistic evidence are two of the most common tools used to positively link persons to a crime. Because of the pioneering efforts of the Army's CID, and individual researchers such as COL Calvin H. Goddard, the task of identifying suspects and convicting the guilty parties can be accomplished more quickly and accurately. — *CPT Patrick Swan*